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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/621,370

07/18/2003

Yong Suk Jin

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EXAMINER

SOL, ANTHONY M

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

05/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/621,370

Applicant(s)

JIN, YONG SUK

Examiner

Anthony Sol

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/18/2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pub. No. US 2003/0145108 A1 ("Joseph") in view of U.S. Patent No. 5,572,533 ("Sunada").

Regarding claim 1,

Joseph shows in fig. 6b receiving a packet (see block 652).

Joseph further shows in fig. 6b determining if a destination MAC address of the packet is in a MAC table (see block 658; also see fig. 5c for MAC table, which has MAC address field 586).

Joseph further shows determining that the destination MAC address of the packet is not in the MAC table (see block 658 with a "No" decision; also see para. 65).

Joseph does not explicitly disclose determining if the destination MAC address of the packet is in a management table if the destination MAC address of the packet is not in the MAC table, and discarding the packet if the destination MAC address of the packet is in the management table.

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Sunada shows in fig. 10, a discard address table 421, and further shows in fig. 11, determining if the address is in a discard address table, and still further shows the "YES" decision and subsequent "DISCARD" action (see block S2; also see col. 6, line 41 to col. 7, line 23, specifically col. 7, lines 17-20).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention was made to modify the packet network of Joseph to include a MAC address discard table as taught by Sunada. One skilled in the art would have been motivated to make the combination so that the resources are devoted to packets that match collection address table in the menu 310 of fig. 9 (Sunada, col. 7, lines 26-29).

Regarding claim 2,

Joseph shows in fig. 6b, sending packet to ingress sub-interface to be sent to egress appliance 302 of fig. 5a, which can be a personal computer that can inherently serve as a host/server (para. 21).

Regarding claim 3,

Joseph discloses if the MAC address is not in the MAC address table, broadcasting the packet (para. 65).

Regarding claim 12,

Joseph shows in fig. 6b inputting a packet in the network switch, the packet adapted to be transmitted to a host 302 of fig. 5a (see block 652).

Joseph does not disclose discarding the packet if a MAC address of the host is registered in a management table because of inaccessibility of the host.

Sunada discloses a monitor fault analyzer for detecting inaccessibility (see abstract, lines 1-4) and shows in fig. 10, a discard address table 421 (claimed management table), and further discloses determining if the address is in the discard address table (see col. 7, lines 17-20).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention was made to modify the packet network of Joseph to include a MAC address discard table as taught by Sunada. One skilled in the art would have been motivated to make the combination so that the resources are devoted to packets that match collection address table in the menu 310 of fig. 9 (Sunada, col. 7, lines 26-29).

3. Claims 4-11 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,317,434 ("Deng") in view of U.S. Patent No. 5,572,533 ("Sunada").

Regarding claims 4-6, 9, 10, 14-16 and 18

Deng disclose receiving a registration request for registering a host in a MAC table and registering a MAC address of the host into the MAC table (see col. 4, lines 32-39).

Deng does not disclose determining if the host becomes inaccessible and transferring the MAC address of the host registered in the MAC table to a management table if the host becomes inaccessible.

Sunada discloses a monitor fault analyzer (see abstract, lines 1-4) and shows in fig. 10, a discard address table 421 (claimed management table), and further discloses determining if the address is in the discard address table (see col. 7, lines 17-20).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention was made to modify the packet network of Joseph to include a MAC address discard table as taught by Sunada. One skilled in the art would have been motivated to make the combination so that the resources are devoted to packets that match collection address table in the menu 310 of fig. 9 (Sunada, col. 7, lines 26-29).

Regarding claims 7, 8, 11 and 17,

Deng discloses that MAC address learner 220 reads the Ethernet address of the originating host and stores the address in the MAC address table 230, if the address is not already stored there (col. 4, lines 32-39).

Regarding claim 13, 19 and 20,

Deng discloses receiving a registration request from a remote device and determining if the remote device is registered in a first table and adding an address for

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the remote device to the first table if the remote device is not in the first table (see col. 4, lines 32-39).

Deng does not disclose monitoring a status of the remote device, receiving a packet for transmission to the remote device, and preventing transmission of the packet to the remote device if the status of the remote devices indicates the remote device is inaccessible.

Sunada discloses a monitor fault analyzer (see abstract, lines 1-4) and shows in fig. 10, a discard address table 421 (claimed management table), and further discloses determining if the address is in the discard address table (see col. 7, lines 17-20).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention was made to modify the packet network of Joseph to include a MAC address discard table as taught by Sunada. One skilled in the art would have been motivated to make the combination so that the resources are devoted to packets that match collection address table in the menu 310 of fig. 9 (Sunada, col. 7, lines 26-29).

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6456597 (Bare) teaches discovery of unknown MAC addresses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Sol whose telephone number is (571) 272-5949. The examiner can normally be reached on M-F 7:30am - 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HASSAN KIZOU
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AMS

5/27/2007